

# SB-6335R

HDMI HDBaseT™ RECEIVER up to 330 Feet (100M)  
(2-way IR, RS-232, HDMI)



### IMPORTANT WARRANTY INFORMATION.

*If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.*



## SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the equipment.
  - C. The equipment has been exposed to rain.
  - D. The equipment does not appear to operate normally, or exhibits a marked change in performance.
  - E. The equipment has been dropped, or the enclosure damaged.

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## HDMI-HDBaseT™ EXTENDER Series

Thank you for purchasing the SB-6335R HDBaseT™ with RS-232 Receiver. You will find this unit easy to install and highly reliable but it is essential that you read this manual thoroughly before attempting to use this extender.

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### INTRODUCTION

Congratulations on your purchase of one of the most innovative HDMI over HDBaseT™ with RS-232 Receivers on the market today. The SB-6335R HDBaseT™ receiver can receive HDMI, IR in/out, IR remote in/out and RS-232 I/O signals from a HDBaseT™ Transmitter via a single category cable for long distances up to 328 feet (100M) maximum. SB-6335R uses a single category LAN CAT6, CAT6a or CAT7 (UTP or FTP) cable with RJ-45 8P8C connectors and supports the 568a or 568b color specification table. This HDBaseT™ receiver provides higher full HD HDMI resolutions of 480i/p, 720p, 1080i/p and 4K2K quality that is identical to the source and to the HD destination display. Receives HDMI digital video, digital multi-channel audio signals, IR in/out and RS-232 series interface signals via a single category cable from the HDBaseT™ Transmitter.

#### CONFORMANCE TEST REPORT

FOR **EN 61000-6-1 / EN 61000-6-3** **CE**

**REPORT NUMBER: 09-07-MAS-282-18-R**

FOR **FCC 47 CFR/Part 15 Subpart B** **FC**

**REPORT NUMBER: 09-07-MAS-282-19-R**

**Model Number: SB-6335R**

Comment Number: SB-6215, SB-6215R, SB-6215RE, SB-6220R SB-6220RE, SB-6240R, SB-6240RE, SB-6335, SB-6335R, SB-6320, SB-6320R

Input: HDBaseT™ CAT6/6a/7 single cable

Output: HDMI & RS-232 series interface

Power Input: +DC12V, 2A



## LOOK A PUPPY!!

## NOW READ THIS!!



### IMPORTANT WARRANTY INFORMATION.

*If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.*

### SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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# FEATURES & SPECIFICATIONS

## FEATURES

- HDBaseT™ HDMI Receiver over a single category LAN cable
- Extender for HDMI, IR in/out and RS-232 series interface in/out and is HDCP compliant
- Supports a CAT6, CAT6a and CAT7 UTP/FTP category cable
- Supports link speeds of up to 3.4Gbps
- Supports Digital RGB 36bits, V1.4a HDMI TMDS format
- Extends higher quality DVI video for 1920x1200 resolution
- Supports HD High Definition full range resolutions 480p, 720p 1080i/1080p and 4K2K
- Supports long distances up to 328 feet/100M between HDBaseT™ Transmitter and HDBaseT™ Receiver
- Supports wall mount pack and rack mount installed for a 19 inch 4U Rack mount
- Supports power DC input with low power consumption (Full load 850mA)
- Power supply universal power switch 50/60Hz, 100~240VAC

## SPECIFICATIONS

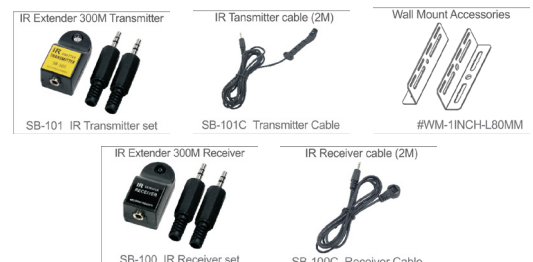
- **Type of Extender:** HDBaseT™ Receiver for HDMI signal over one category LAN Cable
- **Input Signals:** HDMI with Digital Video (TMDS)/Audio 0.5~1.0Vpp, DDC 5Vpp
- **HDBaseT™ Supports:** HDMI Standard, DVI and HDCP Compliant
- **Video Supported:** HDMI and DVI TMDS format for 1920x1200 resolution up to 3.4Gbps Digital RGB 36bits deep color, 3D 1.4a HDMI format
- **HDMI Audio Out Supports:** Multi-channel Audio Formats 5.1 / 7.1, MAT(MLP), Dolby Digital, Dolby TrueHD, Dolby Digital Plus, DTS, DTS-ES 6.1, DTS-HD, DTS-HD-HRA, DTS-HD Master, (PCM-2CH)
- **RS-232 Series Supports:** (1) RS-232 series interface port (Terminal Block 3pin female socket)
- **Category Cable Supported:** CAT6, CAT6a, CAT7 UTP/FTP cable
- **Supports HDMI Resolutions:** 480p, 720p, 1080i/1080p, 4K2K
- **Scan Rate Accepted:** Supports HDMI full HD resolutions; Frequency 24Hz to 60Hz
- **Control:** (1) IR in/out, (1) IR in/out, (1) RS-232 and (1) LAN series interface
- **IR Infrared Frequency:** 38KHz
- **Extender Distance:** Up to 100M (CAT6)
- **Safety Approvals:** CE, FCC, VCCI, REACH & WEEE
- **Dimensions (LxWxH):** 3.15 x 5.12 x 1 in (80x130x26mm)
- **Rack Mount:** Use total 10 pcs installation into one 19 inch rack mount
- **Weight:** 0.325 kgs / 0.715 lb
- **Power Consumption:** Max 750mA (Full load 1080p-60Hz signal with use DC12V input)
- **Power Supply:** Power Input +12VDC, 2A, (Universal Type 50/60Hz, 100~240VAC)

As product improvements are continuous, specifications are subject to change and without notice.

## PACKAGE CONTENTS

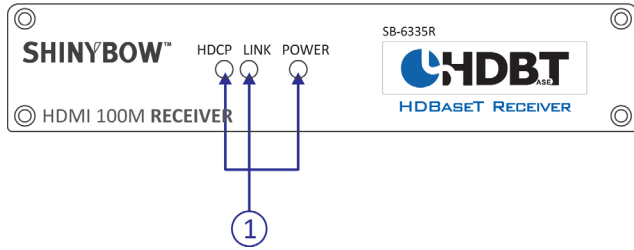
Check that you have the following components:

- SB-6335R HDBaseT™ Receiver console
- SB-100 IR Extender Receiver Set
- SB-101 IR Extender Transmitter Set
- SB-100C IR Extender Receiver Cable (6.5ft (2M))
- SB-101C IR Extender Transmitter Cable (6.5ft (2M))
- 1 in High wall mount pack (Part # WM-1INCH-L80MM)
- HDMI Locking Post Replacement Screws
- Users Guide
- AC/DC Adapter: 12VDC/2A (universal power switch 50/60Hz, 100~240VAC)



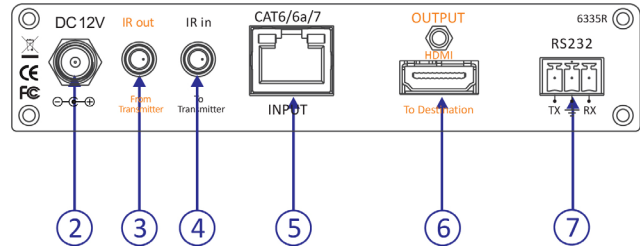
# TYPICAL HOOKUP AND OPERATION

## SB-6335R FRONT



1. STATUS VIA LED SHOW OUT: POWER, LINK & HDCP

## SB-6335R BACK



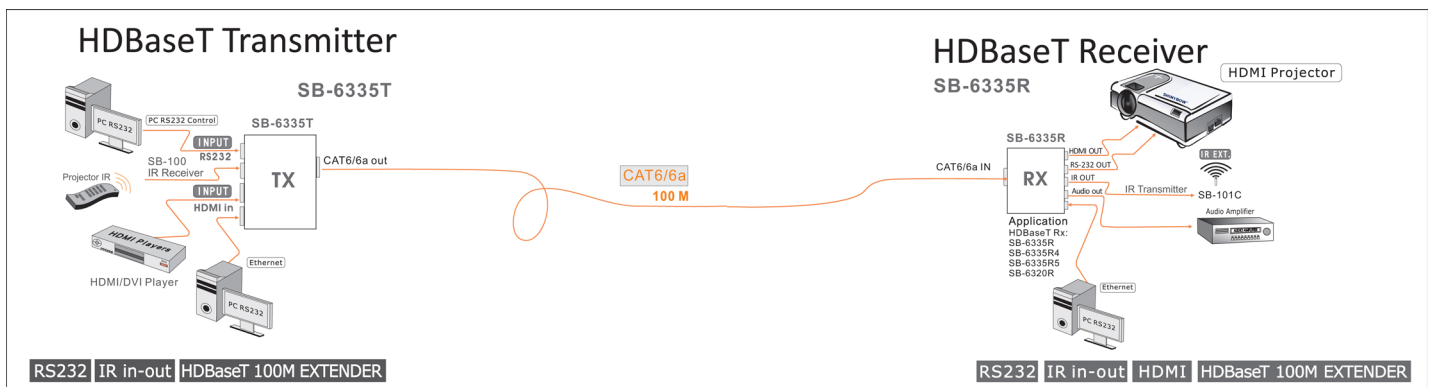
2. DC INPUT: DC12V, 2A
3. IR OUT: Receives IR signal from the HDBaseT™ Transmitter via IR External Receiver SB-100)
4. IR IN: Sends IR signal to the HDBaseT™ Transmitter
5. RJ-45 IN: HDBaseT™ input, Signal from the HDBaseT™ Transmitter
6. HDMI OUT: HDMI output, Signal to HDMI destination display device
7. RS-232 I/O: RS-232 series interface in or out control via a PC

If you remove the HDMI screw posts, you must use the provided HDMI Locking Post replacement screws to keep the internal HDMI jack secure. Removing the HDMI screws without installing the HDMI Locking Post replacement screws will void your warranty.

### Safeguards and Precautions

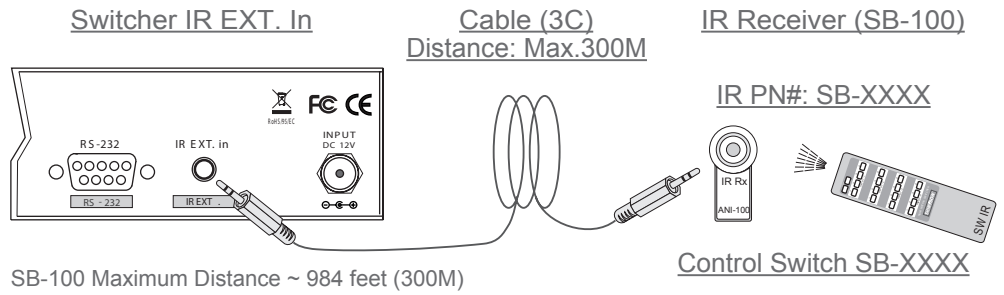
- A. Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- B. Do not place this unit on any support that is not firm, level and strong.
- C. Do not service the unit yourself. Opening the unit's housing will void the warranty.
- D. Servicing must be by Shinybow or by an authorized technician.
- C. Illegal duplication of copyrighted material is strictly prohibited by Federal Laws.

## INSTALLING DIAGRAM



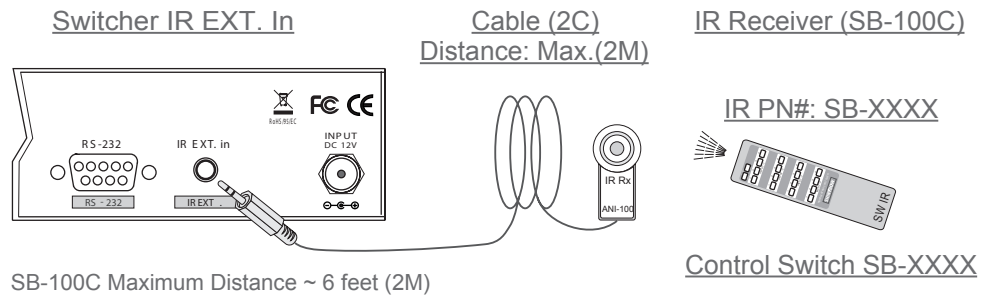
# IR EXTENDER

## 1. SB-100 IR 300M Receiver



The SB-100 IR Receiver is required when using the port "ALL in" Jack.

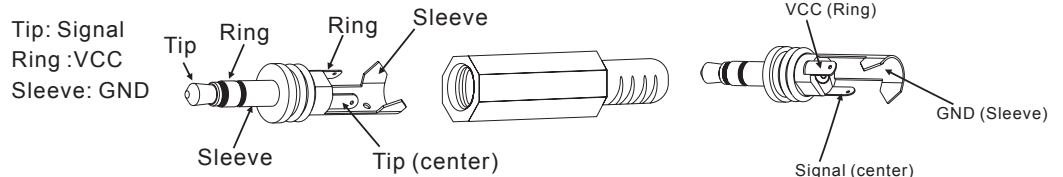
## 2. SB-100C IR 2M Receiver



The SB-100C IR Receiver will not function on the port "ALL in" Jack.

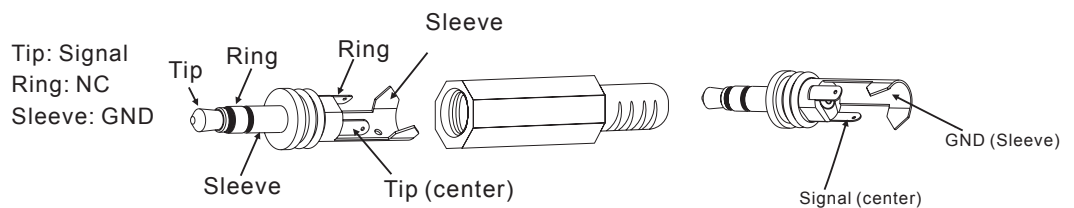
\*\*\* When you plug the External IR extender into the switcher, the front panel IR receiver remains active. \*\*\*

Pin configuration for IR 984 feet (300M) Extender Receiver such as SB-100 compatible



SB-100 Receiver and SB-101 Transmitter The DISTANCE maximum ~ 984 feet (300M)

Pin configuration for IR Receiver 6 feet (2M) cable such as SB-100C compatible



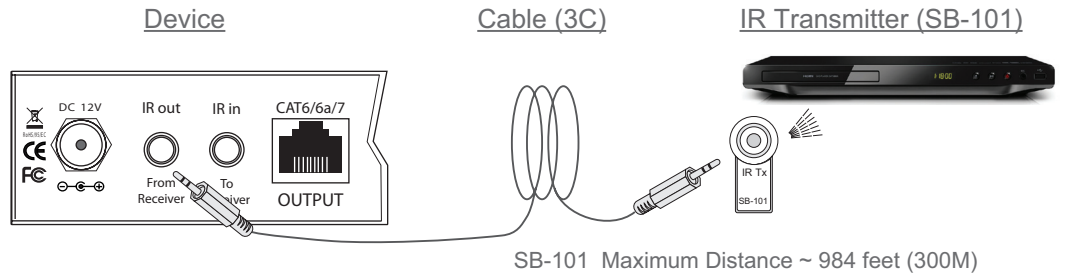
SB-100 Receiver and SB-101C Transmitter The DISTANCE maximum ~ 984 feet (300M)

**Note:** The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.

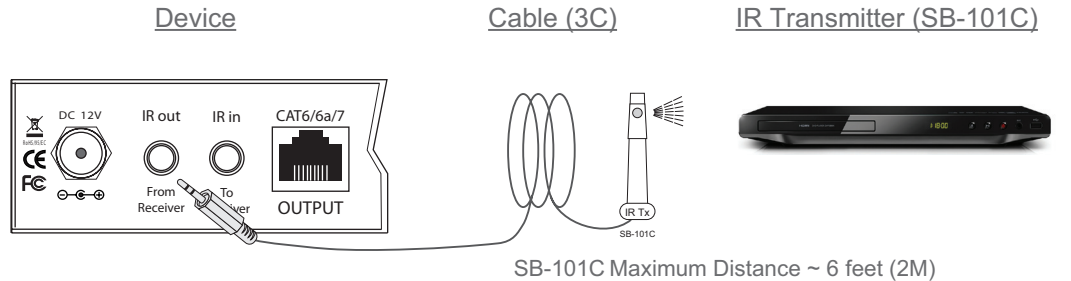
The frequency range of the IR emitter and receivers is 38khz.

# IR EXTENDER

## 1. SB-101 IR 300M Transmitter



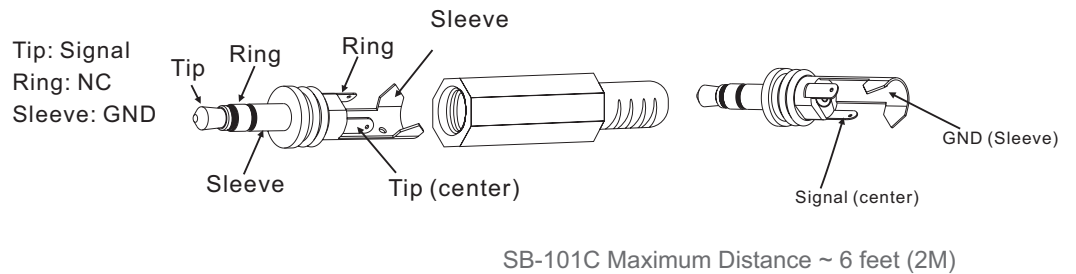
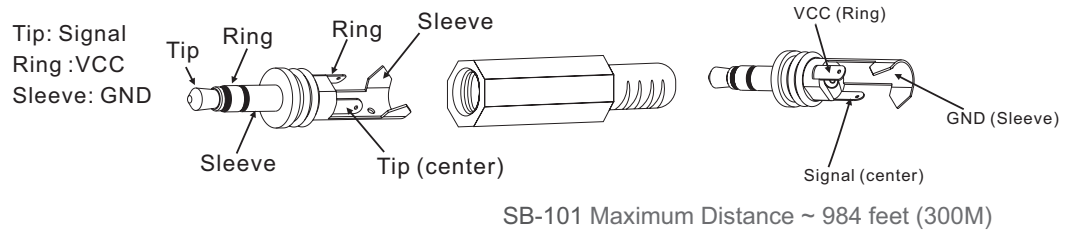
## 2. SB-101C IR 2M Transmitter



\*\*\* When you plug the External IR extender into the switcher, the front panel IR transmitter remains active. \*\*\*

## PIN CONFIGURATION:

### SB-101 and SB-101C Transmitter Pin configuration



**Note:** The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.

The frequency range of the IR emitter and receivers is 38khz.

# RACK MOUNT

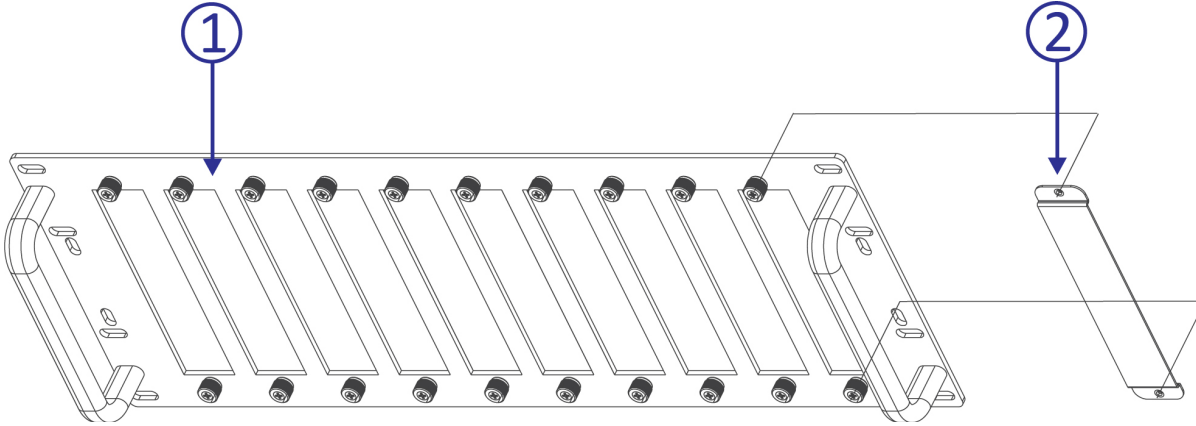
## SB-6069

### SB-6335T/SB-6335R 19 INCH 4U-10 UNITS RACK MOUNT

Model No.: #4U-10p-L130MM

SB-6335T/SB-6335R 4U Ear mount pairs

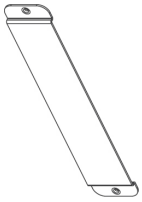
Parts No.: MEER6069ER13000



Model No.: #4U-10p-L130MM-COV

SB-6335T/SB-6335R 4U Ear mount pairs

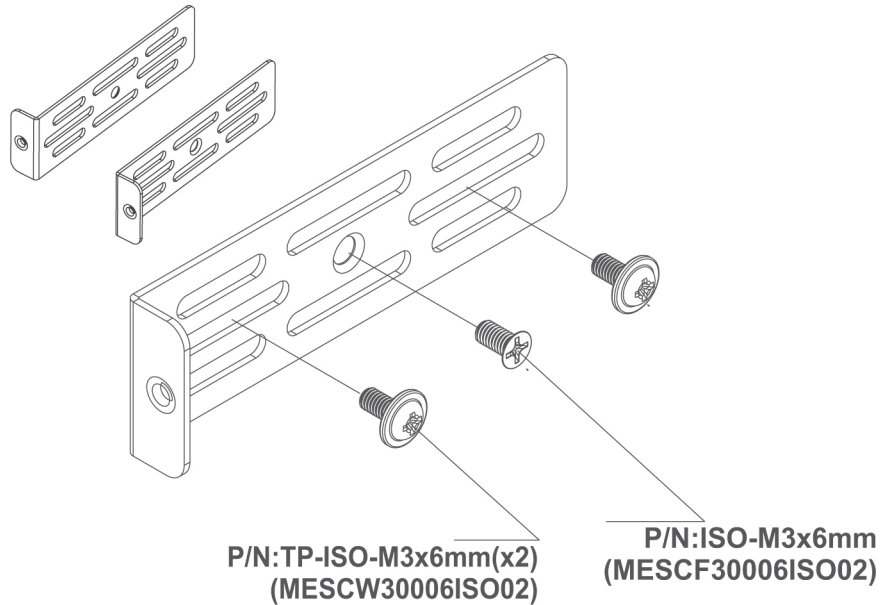
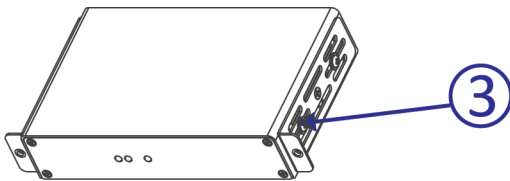
Parts No.: MEER6069ER11000



Model No.: #4U-10p-L80MM-EAR

SB-6335T/SB-6335R 4U Ear mount pairs

Parts No.: MEER6320ER11001

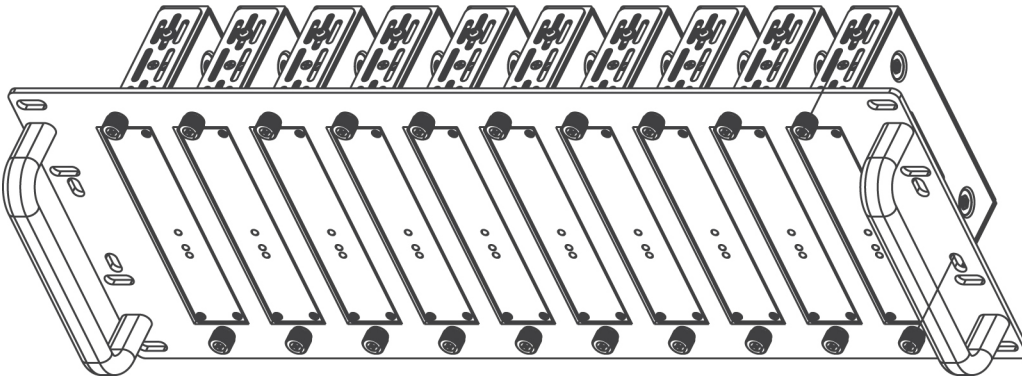




# RACK MOUNT

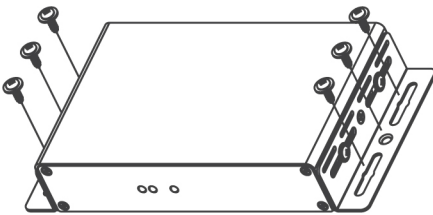
## SB-6069

Complete 19 inch 4U rack mount



Install (10 units) Application: SB-6335T/SB-6335R

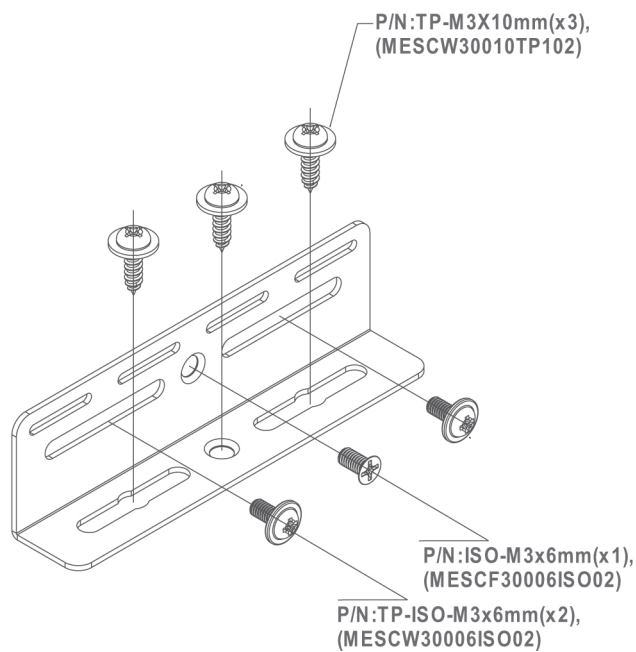
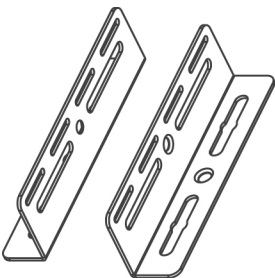
SB-6335T/SB-6335R: Wall mount accessories



Model No.: #WM-1INCH-L80MM

SB-6335T/SB-6335R Wall mount pairs

Parts No.: MEER6320ER11000



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